

B) AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0037] at page 17 with the following rewritten and amended paragraph:

[0037] First member 84 includes a body portion 94 having means for attachment 96 of first member to a connection tube 12, 22. The means for attachment 96 can be any acceptable means that permits a fluidly sealable attachment to be made. In the preferred embodiment discussed ~~discusses~~ above, connection tubes 12, 22 include male threads as means of attachment, so an acceptable means for attachment 96 in this embodiment include female threads which accept the male threads of the connection tubes. A thread sealant, o-ring seal, gasket or other means for preventing leakage of hydraulic fluid may be used between the threads. First member 84 also includes a shaft 98 extending away from body portion 94. The end of shaft 98 includes means for attaching 110 first member to second member. As shown, means for attaching 110 includes male threads, although any other known means of attachment may be used. Bladder 71 fits over shaft 96 98 between the threads and extending back into means for capturing 92, counter bore, as shown. The axial length of the bladder is about 1". Shaft 98 includes an aperture 112 that extends in a radial direction from axially extending bore 82 so that there is fluid communication from axially extending bore 82. The location of aperture 112 is such that the bladder 71 is assembled onto shaft 98 over aperture 112.

Please replace paragraph [0040] at page 18 with the following rewritten and amended paragraph:

[0040] Figure 6 is a schematic of the means for pressurizing the tube expander spindle assembly. While any means for pressurizing may be used, ~~Figure.~~ Figure 6 ~~employ~~ employs a hydraulic system that includes a reservoir for the fluid and a pump. A gage 212 provides a reading of pressure at the pump 200. A sensor also provides a pressure reading to controller 210. The reservoir 226 is in fluid communication with the pump 200, and the pump 200 and reservoir 226 are in communication with controller 210, the pump via line 218 and the reservoir via line 230. The controller 210 also includes sensors that can sense the fluid pressure within the tube, such as sensor 216. Sensor 216 is shown connected to controller 210 via line 202. It will be

understood that all communications between the sensor and controller discussed herein may be by hard-wiring, as shown in the Figures, or may be by means of wireless communications, such as by RF signals. A sensor monitors fluid levels in reservoir 226, which information is fed back to controller 210 via line 230 as shown in Figure 6. A removable tube 214 is securely connected at one end to the pump and at the other end to the first connection tube 12.

Please replace paragraph [0045] bridging pages 22 and 23 with the following rewritten and amended paragraph:

[0045] After spindle assembly 10 is assembled into a tube so that each bladder is adjacent to a tube support as shown in Figure 5 and the assembly is conveniently connected to pump 200 and control box 210, shown in Figure 6 so that the spindle assembly can be pressurized. The pump includes a pressure gage 212, a reservoir 226 for the hydraulic fluid, preferably water, and a means to connect tube 214 and the pump to tube expander spindle assembly 10. This can be accomplished with a tube having fastening means connected to first connection tube 12 or to hard stop 30 depending upon the configuration of the spindle. A pressure sensor 216 in the pump or its line is monitored by controller 210, as shown in Fig. 6 connected to controller by line 218. A means 230 for activating and inactivating pump 200, shown in one form as a line having a switch controlled by controller 210 is shown in Fig. 6. Any other well-known apparatus for activation and inactivation may be used for this operation. A remote switch 220 to start the pressurization is also connected to controller 210 as shown by line 222. Controller 210 is also configured to monitor a remote sensor in spindle assembly 10, here as shown by line ~~222~~ 202. It will be understood that sensors can be monitored by controllers by any other means such as RF signal if desired. Pressurization for copper-turbo tubes having an inner diameter of about 0.625" and a nominal outer diameter of about 0.750" is successfully accomplished without overexpansion at a pressure of about 3200 psig ~~without overexpansion~~. A copper-turbo tube is a copper tube that includes a fin to improve heat exchange, as is well known in the art. As used herein, a copper tube includes tubes manufactured from copper that includes a small amount of alloying elements. Upon activation of the pressurization cycle, the tubes are plastically deformed against the tube sheet apertures. This pressurization can be automatically controlled by

the controller 210, once switch 220 has been activated. The pressure can be driven to a predetermined, preset level and held at this level for a preselected time before being cycled off by the controller. Alternatively, it can be manually cycled on and off. Figure 7 provides a schematic of the tube expander assembly of the present invention.

Please replace paragraph [0047] at page 23 with the following rewritten and amended paragraph:

[0047] The tube expansion process of the present invention utilizing the tube expansion assembly of the present invention produces a very discrete area of uniform expansion around the circumference of the tube. This uniform expansion is not evident in tubes rolled by the prior art mechanical expansion methods, which display only a hint of tube expansion. This contrast is visible in Fig. 8, which displays a pair of hydraulically expanded tubes in the bottom portion of the ~~photo~~ figure and a pair of tubes expanded by the prior art mechanical process in the upper portion of the ~~photo~~ figure.